STATE FOREST LAND
ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decided whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/ watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at http://www.dnr.wa.gov under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered " does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

   Timber Sale Name: **Render** *Agreement #:* **30-079342**

2. Name of applicant: **Department of Natural Resources**

3. Address and phone number of applicant and contact person:

   Pacific Cascade Region
   601 Bond Road
   PO Box 280
   Castle Rock, WA 98611-0280
   Phone: (360) 577-2025
   Contact Person: Robert W. Johnson

4. Date checklist prepared: April 26, 2006

5. Agency requesting checklist: **Department of Natural Resources**

6. Proposed timing or schedule (including phasing, if applicable):

   a. *Auction Date:* **FY 2007**
   b. *Planned contract end date (but may be extended):* **FY 2009**
   c. *Phasing:* **N/A**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

   Timber Sale

   a. *Site preparation:* **Some mechanical site preparation will be done during ground-based harvest activities. Chemical spraying may be done after harvest is complete.**

   b. *Regeneration Method:* **Upon completion of harvest activities and any necessary site preparation treatments, the units will be hand planted with primarily Douglas-fir seedlings to meet or exceed Forest Practices Rules.**

   c. *Vegetation Management:* **Competing vegetation will be monitored periodically. At the time of surveying if competing vegetation is adversely affecting tree survival and growth, a manual or chemical release may be prescribed.**

   d. *Thinning:* **A survey at approximately 12 to 15 years of age will determine if pre-commercial thinning is needed. The stands will be evaluated at approximately 25 to 40 years of age to determine if commercial thinning will be necessary.**

Roads:

The L-1100, L-1110, L-1180, L-1180A, L-1700 roads, Spurs C, D, and D1 will be used to access future harvest activities. See question A.11.c. below for further details.

Rock Pits and/or Sale:

The primary rock source for this proposal will be the L-1180 pit on the L-1180A road in the NW ¼ of section 1, township 3 north, range 4 east W.M. The secondary pit will be a newly developed pit in the SW ¼ of section 28, township 4 north, range 4 east. This pit is located along the L-1100 road just west of the junction with the L-1110. Both pits will be maintained in a safe and drained condition and may be used for other current or future road projects in the vicinity.

Other:

It is possible that a direct sale of firewood from the sale area may occur following harvest completion. If not, then firewood salvage of logging residue by individuals may occur up to one year following harvest.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☐*303 (d) – listed water body in WAU:* ☐*temp* ☐*sediment* ☐*completed TMDL (total maximum daily load):*
☐*Landscape plan:*
☐*Watershed analysis:*
☐*Interdisciplinary team (ID Team) report:*
☒*Road design plan:* **Road plan available at the Pacific Cascade region office.**
☐*Wildlife report:*
☐*Geotechnical report:*
☐*Other specialist report(s):*
☐*Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):*
☒*Rock pit plan:* **Pit plan available at the Pacific Cascade region office.**
☒*Other:* **spotted owl habitat mapping, marbled murrelet reclassified habitat maps, Forest Practices Activity Maps, WAU map for rain-on-snow areas, Forest Resource Plan (DNR, July 1992), State Soil Survey, DNR GIS databases, Habitat Conservation Plan (January, 1997), HCP Checklist, Slope Stability Checklist, Planning and Tracking Special Concerns Report and associated maps, Larch Landscape Road Maintenance and Abandonment Plan #R2900971.**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known.

10. List any government approvals or permits that will be needed for your proposal, if known.

☒*HPA* ☐*Burning permit* ☐*Shoreline permit* ☒*Incidental take permit* ☒*FPA #* **2914314** ☐*Other:*

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. Complete proposal description:

This proposal takes place in the Larch Landscape and is located approximately 19 road miles northeast of Battle Ground, Washington. The Render Timber Sale is a five-unit regeneration harvest of primarily Douglas-fir, with a small component of western hemlock, western red cedar, red alder, and big leaf maple. The proposal area of this five-unit sale is approximately 290 acres, and the harvest acreage is approximately 211 acres, including 2 acres of right-of-way. There are approximately 191 harvestable acres on Forest Board Transfer trust lands (01) and approximately 20 harvestable acres on Common School trust lands (03).

Sale of Timber

Estimated Total Volume: 6,510 MBF
Unit One: 2,040 MBF
Unit Two: 1,510 MBF
Unit Three: 1,550 MBF
Unit Four: 1,030 MBF
Unit Five: 320 MBF
R/W: 60 MBF

Unit 1:
Total Proposed Area Acres (Gross): 75
Total RMZ Acres: 13
Total WMZ Acres: 2**
Existing Road Acres: 2
Total Sale Acres: 58
Total Leave Tree Acres: 5
Total Harvest Acres (net): 53

Unit 2:
Total Proposed Area Acres (Gross): 77
Total RMZ Acres: 15
Total WMZ acres: 1
Existing Road acres: 3
Total Sale Acres: 58
Total Leave Tree Acres: 8
Total Harvest Acres (net): 50

Unit 3:
Total Proposed Area Acres (Gross): 67
Total RMZ Acres: 11
Total Sale Acres: 56
Total Leave Tree Acres: 6
Total Harvest Acres (net): 50

Unit 4: **Total Proposed Area Acres (Gross): 39**
Total RMZ Acres: 0
Existing road acres: 1
Total Sale Acres: 38
Total Leave Tree Acres: < 1
Total Harvest Acres (net): 38

Unit 5: **Total Proposed Area Acres (Gross): 32**
Total RMZ Acres: 12
Total Sale Acres: 20
Total Leave Tree Acres: 2
Total Harvest Acres (net): 18

Overall Totals: **Total Proposed Area Acres (Gross): 290**
Total RMZ Acres: 51
Total WMZ Acres: 3
Total Existing road acres: 6
Total Right of Way Acres: 2
Total Sale Acres (plus 2 acres R/W): 232
Total Leave Tree Acres: 21
Total Harvest Acres (net, includes R/W): 211
Total Leave Trees Scattered and Clumped: 1,850

****There is a WMZ that shares boundaries with both Unit 1 and Unit 5, however the acreage was only applied in Unit 1.**

b. Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.

Stand Description:
The proposed activity will take place in a stand of predominantly Douglas-fir, with a small component of western red cedar, western hemlock, red alder, and big leaf maple occurring in natural openings along Type 5 streams. The average conifer age is approximately 40 to 56 years old. The understory is composed primarily of salal, salmonberry, sword fern, hazel, and vine maple.

Type of Harvest
This activity will be a regeneration harvest.

Overall Unit Objective:
The objective of this activity is to produce revenue for the trust beneficiaries while minimizing the ecological impacts to the local ecosystem. The primary silvicultural objective for this harvest area is to grow a healthy, species diverse stand as rapidly as possible while maintaining or improving the ecological integrity of the area.

c. Road activity summary. See also forest practice application (FPA) for maps and more details.

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		9,000	4	0
Reconstruction		1,500		0
Abandonment		5,100	2	0
Bridge Install/Replace	0			0
Culvert Install/Replace (fish)	0			0
Culvert Install/Replace (no fish)	6			

Temporary roads: A temporary road is defined in Forest Practice rules as a forest road that is constructed and intended for use during the life of the approved forest practices application. All temporary roads must be abandoned in accordance with WAC 222-24-052(3). The length listed above is also included in the "Construction" and "Abandonment" sections of the chart above.

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. *(See timber sale map. See also color landscape/WAU map on the DNR website http://www.dnr.wa.gov under "SEPA Center.")*

a. Legal description:

This sale is located in sections 23, 24, 25, 26, 28, 29, 32, 34, 35, and 36 of township 4 north, range 4 east, W.M. and section 1 of township 3 north, range 4 east, W.M.

b. Distance and direction from nearest town (include road names):

The proposal is located approximately 19 road miles northeast of Battleground, WA. The primary access will be from I-5 exit 9 to SR 502 to SR 503 to Rock Creek Rd. to 152nd Ave to NE Lucia Falls Rd. to Sunset Falls Rd. to Dole Valley Rd. to the L-1700 and L-1100 forest roads.

c. *Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under " SEPA Center.")*

WAU Name	WAU Acres*	DNR WAU Acres*	Sub-Basin Number	Sub-Basin Acres*	DNR Sub-Basin Acres*	Proposal Acres in Sub-Basin (estimated)
Copper Creek	30,691	642	3	1,014	460	60
Horseshoe Falls	28,416	5,366	12	3,824	540	38
			13	2,851	1,780	116
Rock Creek	21,377	16,248	2	1,114	470	44
			5	3,014	1,670	32

13. *Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center" for a broader landscape perspective.)*

Copper Creek WAU

Approximately 2% of the land within the Copper Creek WAU is managed by the DNR. Sub-basin 3 has approximately 45% land under DNR management. There has been periodic regeneration harvesting throughout the WAU. However, in the past seven years no approved forest practice harvest activities on State managed land have occurred in the WAU. Approximately 91% of the WAU managed by the DNR will be greater than 25 years old after harvesting all the presently planned sales. The plans of the adjacent landowners in the WAU are unknown.

Copper Creek WAU	WAU ACRES	ACRES OF EVEN-AGED HARVEST WITHIN THE LAST SEVEN YEARS	ACRES OF UNEVEN-AGED HARVEST WITHIN THE LAST SEVEN YEARS	PROPOSED EVEN-AGED HARVEST IN THE FUTURE	PROPOSED UNEVEN-AGED HARVEST IN THE FUTURE
DNR MANAGED LAND	642	0	0	54	0
PRIVATE OWNERSHIP	30,049	39	161	UNKNOWN	UNKNOWN
TOTAL	30,691	39	161	UNKNOWN	UNKNOWN

Horseshoe Falls WAU

Approximately 19% of the land within the Horseshoe Falls WAU is managed by the DNR. Sub-basin 12 has approximately 14% of the land under DNR management. Sub-basin 13 has approximately 62% land under DNR management. There has been periodic regeneration harvesting throughout the WAU. Within the Horseshoe Falls WAU, parts of 7 regeneration harvests (Linnaeus, Mixed Berry, Mocha, Espresso, Camp Robber, Caveman, and Airstream) have been completed in the last 7 years. Approximately 64% of the WAU managed by the DNR will be greater than 25 years old after harvesting all the presently planned sales. The plans of the adjacent landowners in the WAU are unknown.

The closet regeneration harvest completed within the last 7 years (Caveman U1, 88 acres) is approximately 1.4 miles southeast of Unit 4.

Many areas within the above listed WAU are candidates for future regeneration and commercial thinning harvest activities. Additional road building and rock pit development may occur for access to forest management activities on DNR managed land and other ownerships.

Horseshoe Falls WAU	WAU ACRES	ACRES OF EVEN-AGED HARVEST WITHIN THE LAST SEVEN YEARS	ACRES OF UNEVEN-AGED HARVEST WITHIN THE LAST SEVEN YEARS	PROPOSED EVEN-AGED HARVEST IN THE FUTURE	PROPOSED UNEVEN-AGED HARVEST IN THE FUTURE
DNR MANAGED LAND	5,366	849	188	83	0
PRIVATE OWNERSHIP	23,050	3,975	2,538	UNKNOWN	UNKNOWN
TOTAL	28,416	4,824	2,726	UNKNOWN	UNKNOWN

Rock Creek WAU

Approximately 76% of the land within the Rock Creek WAU is managed by the DNR. Sub-basin 2 has approximately 42% of land under DNR management. Sub-basin 5 has approximately 55% of land under DNR management. There has been periodic regeneration harvesting throughout the WAU. Within the Rock Creek WAU, parts of 20 regeneration harvests (Siamese, Spotted Deer, Verde, Rodeo Ride, Buttercup, Eikcam, Mixed Berry, Stellar, Calico, Ginger, Dole, T-Bone, Hoosier, Salsa, Camp Robber, Caveman, English Patient, Gadwall, Legacy, and Abby Road) have been completed in the last 7 years. Currently, there is one regeneration harvest (Little Goose) that has been sold, and four regeneration harvests (Airstream, Big Toy, Log Dog, and Number Six) that are active. Approximately 79% of the WAU managed by the DNR will be greater than 25 years old after harvesting all the presently planned sales. The plans of the adjacent landowners in the WAU are unknown.

The closet regeneration harvest completed within the last 7 years (Buttercup U1, 53 acres) is adjacent to the southern boundary of Unit 4.

Many areas within the above listed WAU are candidates for future regeneration and commercial thinning harvest activities. Additional road building and rock pit development may occur for access to forest management activities on DNR managed land and other ownerships.

Rock Creek WAU	WAU ACRES	ACRES OF EVEN-AGED HARVEST WITHIN THE LAST SEVEN YEARS	ACRES OF UNEVEN-AGED HARVEST WITHIN THE LAST SEVEN YEARS	PROPOSED EVEN-AGED HARVEST IN THE FUTURE	PROPOSED UNEVEN-AGED HARVEST IN THE FUTURE
DNR MANAGED LAND	**16,248**	**1,418**	**660**	**74**	**0**
PRIVATE OWNERSHIP	**5,129**	**448**	**459**	**UNKNOWN**	**UNKNOWN**
TOTAL	**21,377**	**1,866**	**1,119**	**UNKNOWN**	**UNKNOWN**

Cumulative Effects Mitigation Elements:

The following mitigation measures incorporated into the design of this sale help prevent cumulative impacts to water quality, salmonids, and wildlife:

- **Sale boundaries have been placed an average of approximately 160 – 167 feet away from type 3 streams, 100 feet from forested wetlands, and 100 feet away from type 4 streams.**
- **There are a total of approximately 51 acres of Riparian Management Zones and 3 acres of Wetland Management Zones, which will minimize sediment introduction into streams and maintain riparian structure.**
- **Leave tree islands and individually marked leave trees have been placed to enhance the protection of type 5 streams located within or adjacent to all units.**
- **There will be a minimum of 8 leave trees per acre consisting of conifer and hardwood species for green tree and snag recruitment, left clumped and scattered within the units. Approximately 1,850 leave trees have been identified within the 5-unit proposal.**
- **Of the 9,000 feet of new road construction, 2,900 feet is optional and will be temporary. The optional construction and optional reconstruction, if built, will be abandoned upon completion of harvest activities as well as 700 feet of the required construction.**

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☐Flat, ☐Rolling, ☒Hilly, ☐Steep Slopes, ☐Mountainous, ☐Other:

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

The Copper Creek WAU is situated in the western foothills of the Cascade Mountain Range and contains a variety of landforms, ranging from approximately 900 to 4,400 feet in elevation. Slopes vary from 0% to over 100%. The climate is moderate with 90 to 120 inches of precipitation annually. Approximately 51% of the WAU, or 15,672 acres, is within the rain-on-snow zone. Timber types include Douglas-fir, western hemlock, western red cedar, noble and silver fir, red alder, and big leaf maple. The major drainage for the WAU described is the East Fork of the Lewis River.

The Horseshoe Falls WAU is situated in the western foothills of the Cascade Mountain Range and contains a variety of landforms, ranging from approximately 400 to 4,000 feet in elevation. Slopes vary from 0% to over 100%. The climate is moderate with 60 to 100 inches of precipitation annually. Approximately 16% of the WAU, or 4,687 acres, is within the rain-on-snow zone. Timber types include Douglas-fir, western hemlock, western red cedar, noble and silver fir, red alder, and big leaf maple. The major drainage for the WAU described is the East Fork of the Lewis River.

The Rock Creek WAU is situated in the western foothills of the Cascade Mountain Range and contains a variety of landforms, ranging from approximately 600 to 4,350 feet in elevation. Slopes vary from 0% to over 100%. The climate is moderate with 70 to 100 inches of precipitation annually. Approximately 33% of the WAU, or 6,994 acres, is within the rain-on-snow zone. Timber types include Douglas-fir, western hemlock, western red cedar, noble and silver fir, red alder, and big leaf maple. The major drainage for the WAU described is the East Fork of the Lewis River.

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).

This proposal is located at approximately 900 feet 1,600 to feet in elevation. The timber types are primarily Douglas-fir, with a small component of western hemlock, western red cedar, red alder and big leaf maple. The timber to be harvested ranges in age from approximately 40 to 56 year old. Slopes within the proposal range from 0% to 90%. This proposal is generally very similar to other areas in the WAU's.

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope on the site is up to 90% for short distances in localized areas.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. *Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.*

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
7402	COBBLY LOAM	5-30	97	INSIGNIFIC'T	MEDIUM
3908	COBBLY SILT LOAM	5-30	38	INSIGNIFIC'T	MEDIUM

3918	KINNEY-SKOLY-COMPLEX	30-65	33	No Data	No Data
7408	SKOLY-ROCK OUTCROP-COMPLEX	30-65	33	No Data	No Data
3917	KINNEY-SKOLY-COMPLEX	50-30	19	No Data	No Data
7403	COBBLY LOAM	30-65	10	LOW	MEDIUM
3914	SILT LOAM	5-30	1	INSIGNIFIC'T	MEDIUM
9600	COBBLY LOAM	0-15	1	INSIGNIFIC'T	MEDIUM

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

1) Surface indications:

SMORPH maps were reviewed and field visits verified some potential unstable areas.

2) Is there evidence of natural slope failures in the sub-basin(s)?
☐*No* ☒*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*

There have been some deep-seated landslides within the sub-basins. These are generally associated with slopes greater than 65% found most commonly within the RMZ's along the toe slopes of the main draws, within hollows that extend as far up as mid-slope, and/or within headwalls at the top of the steeper draws.

3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?
☒*No* ☐*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*
Associated management activity:

4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?
☒*No* ☐*Yes, describe similarities between the conditions and activities on these sites:*

5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.

See question B.1.h below for protection measures that will be implemented with this proposal.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads: **4** *Approx. acreage new landings:* **< 2** *Fill source:* **common earth**

See question A.11.c. above for road details.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

A small amount of incidental erosion could occur during the course of road building, rock pit development activities, and yarding. However, prudent road location, appropriate construction techniques and maintenance, as well as the mitigating measures outlined in question B.1.h. below will minimize and control any possible erosion.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*

Approximately 3% of the proposal area will be in rocked road surface.

h. Propose measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)

- **Boundaries were adjusted in Unit 3 (eastern boundary) to mitigate potential unstable soils. Approximately 5 acres of the original proposal were excluded from the harvest area due to potentially unstable slopes.**

<u>Measures to reduce erosion on roads or during active road construction:</u>
- **Roads will be either out-sloped or constructed with crowns, ditches, and cross-drains.**
- **Soils exposed during road construction will be grass seeded and fertilized.**
- **Seasonal timing restrictions will prohibit road construction from November 1 to April 30 to reduce activity during wet weather conditions.**
- **Cross drains will be installed and maintained.**
- **Sediment delivery will be addressed as needed during operations and may include the use of water bars or silt traps.**
- **There will be periodic maintenance and inspection of the road system to insure proper drainage.**

<u>Measures to reduce erosion during active logging operation:</u>
- **Timber shall be felled and yarded away from all streams.**
- **Tracked skidders will be allowed only during the months of June to October and/or when dry soil conditions permit.**
- **Ground based yarding will be restricted to slopes less than 35% and during dry soil conditions only.**
- **The lead-end of logs will be suspended during all yarding operations.**
- **The potential for sediment delivery will be addressed as needed during operations and may include the use of water bars or silt traps.**

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust *from truck traffic, rock mining, crushing or hauling,* automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Minor amounts of engine exhaust from logging equipment and dust from vehicle traffic and logging equipment are expected while the project is active.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

None

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *(See timber sale map and forest practice base maps.)*

There are five type 3, four type 4, and six type 5 streams, and three forested wetlands (wetlands are > 0.25 and < 1 acre in size) located within the proposed area. Part of the streams in Unit 1 flow west to King Creek and part of them flow east to Copper Creek. The streams in Unit 2 flow west to Rock Creek. Part of the streams in Unit 3 flow north to the East Fork Lewis River and part of them flow east to Copper Creek. The streams in Unit 5 flow west to King Creek.

a) Downstream water bodies:

Units 1 and 5 have streams that drain into King Creek, which flows 0.75 miles northwest into the East Fork Lewis River.

Units 1 and 3 have streams that drain into Copper Creek, which flows 0.4 miles north into the East Fork Lewis River.

All streams associated with Unit 2 drain into Rock Creek, which flows 2.1 miles northwest into the East Fork Lewis River.

The East Fork Lewis River flows east approximately 17 miles before it drains into the Columbia River.

b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
Stream	**3**	**5**	**160 -167**
Stream	**4**	**4**	**100**
Stream	**5**	**6**	**0**
Wetland	**N/A**	**3**	**100**

c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.

There are five type 3s, four type 4s, three forested wetlands, and six type 5 streams within or adjacent to the proposed unit boundaries. The type-3 streams have been buffered by an average of approximately 160 - 167 feet on each side. The type-4 streams are buffered by 100 feet on all sides. The forested wetlands are buffered by 100 feet on all sides. The type-5 streams have been protected with leave trees where possible. No harvest activities will take place within the RMZ's or WMZ's. All streams have been evaluated per the Washington State Forest Practices Interim Water Type Rules and protected per current HCP guidelines and procedures.

2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☐*No* ☒*Yes (See RMZ/WMZ table above and timber sale map.)*
Description (include culverts):

Timber felling, bucking, cable yarding, tracked mobile yarding, and/or road building will take place within 200 feet of all the described waters/wetlands. .

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *(Include diversions for fish-passage culvert installation.)*
☒*No* ☐*Yes, description:*

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☒*No* ☐*Yes, describe location:*

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒*No* ☐*Yes, type and volume:*

7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?

Generally, the high potential areas are located on slopes of 65% or greater and often involve unstable soils and/or steep head walls. Some past natural failures have entered streams in small amounts. However, no slope failures associated with past timber harvest activities have been identified within the sub-basins, and none have been observed along the existing roads in these sub-basins. With the proposed mitigating measures implemented, this proposal is not expected to contribute material to surface waters. See questions B.1.c, B.1.d, B.1.f, B.1.h, and B.3.9).

8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?
☐*No* ☒*Yes, describe changes and possible causes:*

See question B.3.a.13. below.

9) Could this proposal affect water quality based on the answers to the questions 1-8 above?
☐*No* ☒*Yes, explain:*

This proposal could possibly introduce minor amounts of sediment into the streams adjacent to the proposal area as a result of road building and logging operations during early stages of activity. The erosion control measures and operation procedures outlined in B.1.f. and B.1.h. are expected to minimize the chances of sediment delivery.

10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?

Copper Creek WAU averages approximately 3 miles of road per square mile across all ownership. It is estimated that sub-basin 3 averages approximately 3 miles of road per square mile.

Horseshoe Falls WAU averages approximately 5 miles of road per square mile across all ownership. It is estimated that sub-basin 12 averages approximately 4 miles of road per square mile, and sub-basin 13 averages 4 miles of road per square mile.

Rock Creek WAU averages approximately 4 miles of road per square mile across all ownership. It is estimated that sub-basin 2 averages approximately 4 miles of road per square mile, and sub-basin 5 averages 4 miles of road per square mile

Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☒*No* ☐*Yes, describe:*

11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, ***STOP HERE*** *and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.*
☒*No* ☐*Yes, approximate percent of WAU in significant ROS zone.*
Approximate percent of sub-basin(s):

12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?

N/A

13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?
☐*No* ☒*Yes, describe observations:*

Normally, there are few significant changes associated with peak flows in the WAU or sub-basins. However, in the winter of 1996, a 100-year event occurred. The rainstorm set rainfall and flood level records in southwest Washington and northwest Oregon. The event caused many shallow mass-wasting events. Many stream channels were altered in this event due to extremely high stream flows with accompanying sediment loads and possibly large woody debris delivery. The full extent of this is not known.

14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.

This proposal may slightly change the timing, duration, or amount of peak flow. Flow rates may increase slightly during low flow periods due to decreased transpiration and interception during the first decade of new forest growth.

15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?
☒*No* ☐*Yes, possible impacts:*

There are residences with agricultural and domestic wells down slope from Unit 2 in N 1/2 NE ¼ Section 32, T4N, R4E. There are wells adjacent to Units 1 and 3, but they are on the other side of the East Fork Lewis River and Copper Creek from this proposal.

16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.

- **The buffers described in question 3.a.1.c above will prohibit harvest activities within an average of approximately 160 - 167 feet of type-3 streams, within 100 feet of the type-4 streams, and within 100 feet of forested wetlands.**
- **Most of the type-5 streams have been protected with leave trees.**
- **Timber will be felled away from all streams.**
- **There will be a 30-foot equipment limitation zone from all type 5 streams.**

- **Any slash that may enter a stream would be cleaned out per contract requirements. Further erosion control measures will be implemented if necessary**
- **A site visit was made by a DNR Hydrologist and it was determined the proposal would have no impacts on these wells due to there location to the proposal.**

b. Ground *Water*:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Relief culvert drainage may increase ground water recharge directly below culvert outlets.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Minor amounts of oil, fuel, and other lubricants may inadvertently be discharged to the ground as a result of heavy equipment use or mechanical failure. No lubricants will be disposed of on-site. This proposed activity is expected to have no impact on ground water.

3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?
☐*No* ☒*Yes, describe:*

There are residences with agricultural and domestic wells down slope from Unit 2 in N ½ NE ¼ Section 32, T4N, R4E. There are wells adjacent to Units 1 and 3, but they are on the other side of the East Fork Lewis River and Copper Creek from this proposal.

a) Note protection measures, if any.

- **The buffers described in question 3.a.1.c above will prohibit harvest activities within an average of approximately 160 - 167 feet of type-3 streams, within 100 feet of the type-4 streams, and within 100 feet of forested wetlands.**
- **Most of the type-5 streams have been protected with leave trees.**
- **Timber will be felled away from all streams.**
- **There will be a 30 foot equipment limitation zone from all type 5 streams.**
- **Any slash that may enter a stream would be cleaned out per contract requirements. Further erosion control measures will be implemented if necessary**
- **A site visit was made by a DNR Hydrologist and it was determined the proposal would have no impacts on these wells due to there location to the proposal.**

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water will be the only runoff associated with this proposal. On roads, storm runoff will be collected by road ditches and diverted through cross-drains over energy dissipaters and onto the forest floor. Within the harvest unit, runoff will follow natural topography and be largely absorbed.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Due to the wide buffers on the streams associated with this proposal, no logging slash from harvest activities is anticipated to enter perennial waters or type-5 streams.

a) Note protection measures, if any.

Any logging slash that inadvertently enters the type 5 streams during the process of harvesting will be removed. Leave trees were left clumped and individually marked along the type 5 streams in all units.

See question B.1.h. for site specific protection measures to help control erosion and protect water quality.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

4. Plants

a. Check or circle types of vegetation found on the site:

☒deciduous tree: ☒alder, ☒maple, ☐aspen, ☐*cottonwood,* ☐*western larch,* ☐*birch,* ☐other:
☒evergreen tree: ☒*Douglas fir,* ☐*grand fir,* ☐*Pacific silver fir,* ☐*ponderosa pine,* ☐*lodgepole pine,* ☒*western hemlock,* ☐*mountain hemlock,* ☐*Englemann spruce,* ☐*Sitka spruce,* ☒*red cedar,* ☐*yellow cedar,* ☐other:
☒shrubs: ☐*huckleberry,* ☒*salmonberry,* ☒*salal,* ☒*other:* ***vine maple, Oregon grape, elderberry, hazel***
☒grass
☐pasture
☐crop or grain
☒wet soil plants: ☐cattail, ☐buttercup, ☐bullrush, ☒skunk cabbage, ☒*devil's club,* ☐other:
☐water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:
☒other types of vegetation: ***bracken fern, sword fern, maidenhair fern, Oregon oxalis, vanilla leaf, blackberry***
☐*plant communities of concern:*

b. What kind and amount of vegetation will be removed or altered? *(See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)*

Approximately 6,510 MBF of primarily Douglas-fir, with smaller components of western hemlock, western red cedar, red alder, and big leaf maple will be removed from the site. The age of the timber ranges from 40 to 56 years of age. Mechanical site preparation will be needed before planting on portions of the harvest area to establish a viable future plantation. Some vine maple, hazel, and salmonberry will be removed during harvest activities on mobile ground to create 400 well-distributed plantable spots per acre. It is probable that chemical site prep will be needed, as there is heavy brush competition on parts of the sale area.

1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under "SEPA Center.")

Unit 1 –The northern boundary of Unit 1 is adjacent to a state managed 50+ year-old mixed Douglas fir and western hemlock stand. The eastern boundary is adjacent to a state managed 40 year-old red alder stand. The southern boundary is adjacent to an 8 year-old state managed Douglas-fir plantation and Unit 5. The western boundary is adjacent to an 8 year-old state managed plantation.

Unit 2 –The northern boundary of Unit 2 is adjacent to a type 3 RMZ and beyond that a state managed 50 year-old Douglas-fir and western hemlock stand. The eastern boundary is adjacent to a state managed 50 year-old Douglas-fir stand. The southern and eastern boundaries are adjacent to private property that is mixed forestland, residential, and agriculture.

Unit 3 – The northern boundary of Unit 3 is adjacent to a 50 year-old private owned Douglas-fir stand. The eastern boundary is adjacent to a state managed 40 year-old red alder stand. The southern boundary is adjacent to a state managed 50 year-old Douglas-fir and western hemlock stand. The western boundary is adjacent to a privately owned 40 year-old red alder stand.

Unit 4 – The northern boundary of Unit 4 is adjacent to a state managed 40 year-old Douglas fir stand. The eastern and western boundaries are adjacent to a state managed 50 year-old Douglas-fir and western hemlock stand. The southern boundary is adjacent to a state managed 4 year-old plantation.

Unit 5 – The northern boundary of Unit 5 is adjacent to a RMZ and beyond that is a state managed 8 year-old plantation. A small portion of Unit 1 is also adjacent to the northern boundary of Unit 5. The eastern and western boundaries of Unit 5 are adjacent to a state managed 50 year-old Douglas-fir and western hemlock stand. The southern boundary is adjacent to an RMZ and beyond that is a state managed 40 year-old Douglas-fir stand.

2) Retention tree plan:

TSU/Area	Distribution Method for Retention Trees and Snags	Acres in Clumps	Total Trees Left
1	**Clumped and Scattered**	**5**	**466**
2	**Clumped and Scattered**	**8**	**464**
3	**Clumped and Scattered**	**6**	**451**
4	**Clumped and Scattered**	**< 1**	**307**
5	**Clumped and Scattered**	**2**	**162**
	Total Leave Tree Acres (Excluding acres of individual trees)	**21**	**1,850**

All units will have an average of eight wildlife and green recruitment leave trees per acre remaining on site upon completion of harvest activities. Selected pockets of leave tree clumps and individually marked trees were left throughout the units in strategic locations, which contain wet areas, type-5 streams, down woody debris, snags, and various trees having desirable snag recruitment characteristics. Larger clumps were left on the edge of the units to protect large, wet, potentially unstable areas. All retained trees will provide wildlife habitat, older forest components, and a seed source to surrounding areas. The site will be replanted with conifer seedlings at a stocking level that meets or exceeds Forest Practices standards.

c. List threatened or endangered *plant* species known to be on or near the site.

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
None Found in Database Search				

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

See question A.11.b. and B.5.d) retention tree narrative below.

5. Animal

a. Circle or check any birds animals *or unique habitats* which have been observed on or near the site or are known to be on or near the site:

birds: ☒hawk, ☐heron, ☐eagle, ☒songbirds, ☐*pigeon*, ☒other: ***ravens, owls, ruffed grouse***
mammals: ☒deer, ☒bear, ☒elk, ☒beaver, ☒other: ***chickaree, mountain beaver, bobcat, coyote, mountain lion, porcupine,***
fish: ☐bass, ☒salmon, ☒trout, ☐herring, ☐shellfish, ☐other:
unique habitats: ☐*talus slopes*, ☐*caves*, ☐*cliffs*, ☐*oak woodlands*, ☐*balds*, ☐*mineral springs*

b. List any threatened or endangered species known to be on or near the site *(include federal- and state-listed species).*

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status

None Found in Database Search				

This proposal is located within Evolutionary Significant Units (ESU's) for lower Columbia steelhead, lower Columbia Chinook, Columbia River chum, and potential bull trout habitat. See question B.5.d. below for mitigating measures taken to protect fish habitat.

c. Is the site part of a migration route? If so, explain.
☒*Pacific flyway* ☐*Other migration route:* *Explain if any boxes checked:*

This proposal is located in the Columbia River Flyway, which is part of the Pacific Flyway. Migratory waterfowl also use the Columbia River Flyway; however, the area in which this proposal is contained is not generally the type of area used for resting or feeding by migratory waterfowl. In addition, many neotropical migratory birds are closely associated with riparian areas, cliffs, snags, and structurally unique trees of Pacific Northwest forests. Riparian areas and special habitats are protected through implementation of DNR's Habitat Conservation Plan.

d. Proposed measures to preserve or enhance wildlife, if any:

- **There will be a minimum of 8 leave trees per acre consisting of conifer and hardwood species for green tree and snag recruitment, left clumped and scattered within the units. There are approximately 21 acres of leave tree clumps, and 605 individually marked trees throughout all units to total 1,850 leave trees.**
- **Selected pockets of leave tree clumps and individually marked trees were left throughout the units in strategic locations, which contain wet areas, type-5 streams, down woody debris, snags, and various trees having desirable snag recruitment characteristics.**
- **The type-3 streams have been buffered by an average of approximately 160 -167 feet on each side, within 100 feet of the type-4 streams, and within 100 feet of forested wetlands.**
- **Approximately 51 acres are buffered in RMZ's/WMZ's, which will eliminate or minimize sediment delivery.**
- **Riparian areas will be protected, therefore preserving fish and amphibian habitat.**
- **Wildlife travel corridors will be maintained through the units along riparian areas.**
- **Big game forage will improve as new regeneration and early plant species evolve post harvest.**
- **Any snags to be felled for safety reasons shall remain near where they fall.**
- **No existing down woody debris greater than 36 inches in diameter shall be removed from the site.**

This activity conforms to the 1992 Forest Resource Plan, the 1997 Habitat Conservation Plan, and Washington State Forest Practices rules and regulations.

1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.
Species /Habitat: Protection Measures:
Species /Habitat: Protection Measures:
Species /Habitat: Protection Measures:

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

None

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

There will be minimal health hazards due to operating heavy equipment and the possible minor spillage of fuel and lubricating oils. The risk of forest fire is always present and will be increased for approximately two years following harvesting due to logging slash. Contractual clauses require operators to use established safety standards.

1) Describe special emergency services that might be required.

- **Firefighting by the Department of Natural Resources, which may be supported by local fire districts.**
- **Emergency medical and/or ambulance service for personal injuries.**
- **Responses by the Department of Ecology if a spill were to occur.**

2) Proposed measures to reduce or control environmental health hazards, if any:

- **Compliance with state laws.**
- **Fire equipment will be required on site during fire season.**
- **Operations will cease if relative humidity falls below 30%.**
- **Public access may be restricted during times of high fire danger.**

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.

Noise from rock drilling/crushing machinery, rock blasting, road building and logging equipment, chain saws, yarding whistles, and log/dump trucks will increase during periods of operation on a short-term basis.

3) Proposed measures to reduce or control noise impacts, if any:

None planned.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? *(Site includes the complete proposal, e.g. rock pits and access roads.)*

- **Timber Production**
- **Mutual use road easements have been granted to other forestland owners for forest management activities in the vicinity.**
- **Rock from rock pits may be sold to adjacent forest landowners for forest road maintenance.**

b. Has the site been used for agriculture? If so, describe.

No

c. Describe any structures on the site.

None

d. Will any structures be demolished? If so, what?

No

e. What is the current zoning classification of the site?

Forest Land

f. What is the current comprehensive plan designation of the site?

Resource Land

g. If applicable, what is the current shoreline master program designation of the site?

Not Applicable

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No

i. Approximately how many people would reside or work in the completed project?

None

j. Approximately how many people would the completed project displace?

None

k. Proposed measures to avoid or reduce displacement impacts, if any:

None

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

These harvest units will be reforested with commercial species and retained as forestland. This proposal is consistent with current land use designations and zoning regulations. See question A.11.b. above.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None

c. Proposed measures to reduce or control housing impacts, if any:

None

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?

N/A

b. What views in the immediate vicinity would be altered or obstructed?

Forest clearing will be visible from immediate forest roads and county roads.

1) Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?
☐*No* ☒*Yes, viewing location:*

Some of this proposal can be seen from scattered residential areas along Dole Valley Road.

2) Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?
☒*No* ☐*Yes, scenic corridor name:*

3) How will this proposal affect any views described in 1) or 2) above?

The completed proposal as seen from some scattered residential areas will result in a removal of trees in the background. This proposal is similar to other forest management activities in the vicinity.

c. Proposed measures to reduce or control aesthetic impacts, if any:

The individually scattered leave trees, leave tree clumps, and RMZ's throughout the proposal will reduce the aesthetic impact. Leave tree clumps have been placed in areas to lessen the view-shed impacts. The harvest area will be re-planted with seedlings following the completion of harvest and site preparation activities.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No

c. What existing off-site sources of light or glare may affect your proposal?

None

d. Proposed measures to reduce or control light and glare impacts, if any:

None

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Several informal recreation activities take place in the area such as hunting, horseback riding, hiking, mountain biking, and berry and mushroom picking.

b. Would the proposed project displace any existing recreational uses? If so, describe:

The informal recreational opportunities addressed in question 12.a. above may be temporarily interrupted during periods of operation on site.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

There are known cultural resource sites in adjacent and within the same sections as this proposal. This prompted a consultation and assessment of the high probability areas within the proposal for surveying by our cultural resource technician. Generally, these are prehistoric sites associated with native american villages and travel routes in the area.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

Several of the units are located along a ridgeline that may have been used as a travel route for historic/prehistoric peoples. This initiated the request to survey the area for cultural resources.

c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)

The Region's cultural resource technician has surveyed high probability areas within this proposal. No artifacts or cultural resource sites were identified. USGS maps were also examined for evidence of historic sites, however none were identified during the survey.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

See question A.12.b. above and the timber sale vicinity map.

1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?

Traffic from this operation will marginally increase noise, dust, and vehicle density, which will require a heightened awareness for safety measures. Contractual clauses require the operator to use existing safety standards. Truck traffic from this individual operation should not increase the need for public road maintenance.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No

c. How many parking spaces would the completed project have? How many would the project eliminate?

None

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

Some new forest roads will be constructed. See question A.11.c. for details

1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?

This proposal will have very little impact since all of the new road construction will be forest management roads that end on state land. All forest management roads to be utilized will be tributary to paved county roads, which already have residential truck traffic.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

The completed project will generate less that one vehicular trip per day on average. Up to 25 vehicular trips per day could occur during peak harvest activities. These trips would occur primarily between the hours of 0500 to 1700 on weekdays.

g. Proposed measures to reduce or control transportation impacts, if any:

See question B.14.a.1) above.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No

b. Proposed measures to reduce or control direct impacts on public services, if any.

None

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

None

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: Jon Paul Anderson Forester 2 Date: May 1, 2006
Title

Reviewed by: Ronn Schuttie Date: _____
State Lands Assistant Manager

Comments: _____